restricting motion comprises a circular planar spring assembly coupled to the probe member for restricting motion of the probe member in all directions except along the axis of the probe member.

7. (amended) A transducer for use in a viscoelastic analyzer of the type in which a mechanical probe member is immersed in a fluid or gel whose viscoelastic characteristics are to be determined, the probe member being driven to impart a desired oscillating motion thereto, the improvement comprising stop means for limiting deflection of the probe member, both during periods of operation and inoperation of the viscoelastic analyzer, in the direction of the desired oscillating motion.

11. A transducer as in claim 4, wherein the circular planar spring assembly comprises a pair of circular planar springs spaced apart from each other and coaxially coupled at their peripheral edges to a circular ring.

12. A transducer as in claim 11, wherein each of the circular planar springs compises a beryllium copper circular planar ring.